Recombinant human RAGE/AGER protein

Catalog Number: ATGP3923

PRODUCT INFORMATION

Expression system
Baculovirus

Domain
24-342aa

UniProt No.
Q15109

NCBI Accession No.
NP_001127

Alternative Names
RAGE, AGER, advanced glycosylation end product-specific receptor isoform 1, SCARJ1, Receptor for advanced glycosylation end products

PRODUCT SPECIFICATION

Molecular Weight
61.2 kDa (561aa)

Concentration
0.25mg/ml (determined by BCA assay)

Formulation
Liquid in. Phosphate-Buffered Saline (pH 7.4) containing 10% glycerol

Purity
> 90% by SDS-PAGE

Endotoxin level
< 1 EU per 1ug of protein (determined by LAL method)

Biological Activity
Measured by the ability of the binding activity in a functional ELISA. The ED50 range ≤15ug/ml.

Tag
hIgG-His-Tag

Application
SDS-PAGE, Bioactivity

Storage Condition
Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Recombinant human RAGE/AGER protein

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Description

RAGE, also known as advanced glycosylation end product-specific receptor isoform 1, is a member of the immunoglobulin super-family transmembrane proteins. It mediates interactions of advanced glycosylation end products (AGE). AGE/RAGE signaling plays an important role in regulating the production/expression of TNF-alpha, oxidative stress, and endothelial dysfunction in type 2 diabetes. This protein contributes to the translocation of amyloid-beta peptide (ABPP) across the cell membrane from the extracellular to the intracellular space in cortical neurons. Recombinant human RAGE, fused to hIgG-His-tag at C-terminus, was expressed in insect cell and purified by using conventional chromatography techniques.

Amino acid Sequence

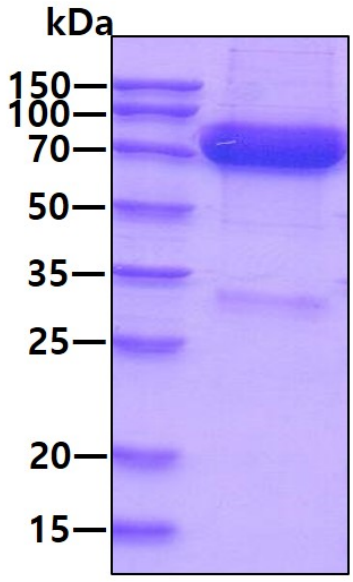
<ADL>QNITARI GEPLVLKCKG APKKPPQRLE WKLNTGRTEA WKVLSPQGGG PWDSVARVLP NGSLFLPAVG IQDEGIFRCQ AMNRNGKETK SNYRVRVYQI PGKPEIVDSA SELTAGVPNK VGTCVSEGSY PAGTLSWHLD GKPLVPNEKG VSVKEQTRRH PETGLFTLQS ELMVTPARGG DPRPTFSCSF SPGLPRHRAL RTAPIQPRVW EPVPLEEVQL VVEPEGGAVA PGGTVTLTCE VPAQPSPQIH WMKDGVPLPL PPSPVLILPE IGPQDQGTYS CVATHSSHGP QESRAVSISI IEPGEEGPTA GSVGGSGLGT LA<LEPKSCDK THTCPPCPAP ELLGGPSVFL FPPKPKDTLM> <ISRTPEVTCV VVDVSHEDPE VKFNWYVDGV EVHNAKTKPR EEQYNSTYRV VSVLTVLHQD WLNGKEYKCK VSNKALPAPI EKTISKAKGQ> <PREPQVYTLP PSRDELTKNQ VSLTCLVKGF YPSDIAVEWE SNGQPENNYK TTPPVLDSDG SFFLYSKLTV DKSRWQQGNV FSCSVMHEAL> <HNHYTQKSLS LSPGKHHHHH H>

General References

Giurdanella G., et al. (2017) Biochem Pharmacol. 142:145-154
Zhang L., et al. (2019) Int J Mol Med. 44:885-892

DATA

SDS-PAGE



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

Biological Activity

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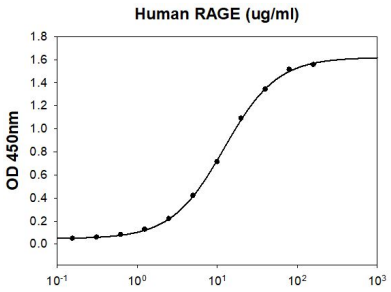

Human HMGB1 is coated at 20 ug/ml (100 ul/well) can bind Human RAGE. The ED50 range ≤15 ug/ml.